

REMARKS

Upon entry of the above amendment, claims 1-11 will be all the claims pending in the application. Claim 1 has been amended so that it is specifically directed to the particular case recited in that claim. Claim 11 has been added based on the disclosure that the filtration units are made of a ceramic material as can be found in paragraphs [0035]-[0036] of the application as published, and based on the disclosure that the binding agent is made of a ceramic cement as can be found in paragraph [0045].

Entry of the above amendment is respectfully requested.

Anticipation Rejection over Merriman

On page 2 of the Office Action, in paragraph 2, claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Merriman US 2,952,579.

In response, Applicants note initially that Merriman discloses (Figure 2) a sandwich panel structure comprising two metal surfaces 2 and 3 separated by an honeycomb core 1 which is also made of metal. Core 1 is fixed on each surface 2 (3) by an adhesive layer 9 (10). Each adhesive layer 9 (10) comprises a fabric 11 imbedded within a thermosetting adhesive. The fabric 11 is obtained from glass fiber threads.

Applicants submit that the materials of the elements building up the structure of Merriman are not at all the materials used in the present invention.

In particular, according to the present invention, the reinforcement means allows the thermal flux to propagate through the joint. Such a function is not disclosed by Merriman. In fact, Applicants submit that a glass fiber thread fabric cannot exhibit such a function.

That is, Applicants submit that the claimed reinforcement means allows the thermal flux to propagate through the joint. Further, Applicants submit that such a function is not disclosed by Merriman, and a glass fiber thread fabric cannot exhibit such a function.

Thus, Applicants submit that claim 10 is not anticipated by Merriman, and withdrawal of this rejection is respectfully requested.

Anticipation Rejection over Adiletta

On page 2 of the Office Action, in paragraph 4, claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by Adiletta US 5,228,891.

In response, Applicants note initially that Adiletta discloses (Figure 2) a particle filter for which exhaust gases are forced through a plan filter located between a row of input cells and a row of output cells. The filter 57 is maintained by two plates 59 made of a wire mesh.

Applicants wish to emphasize the fact that plate 59 is not a reinforcement means of a joint bonding two filtration elements together, but rather is a means for maintaining the particle filter 57 in position.

Thus, Applicants submit that claim 10 is not anticipated by Adiletta, and withdrawal of this rejection is respectfully requested.

Obviousness Rejection over Fujita in view of Merriman

On page 3 of the Office Action, in paragraph 4, claims 1 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. WO03/048072 (translation provided by US 7,138,168) in view of Merriman US 2,952,579.

In response, Applicants note initially that Fujita discloses a honeycomb structure

comprising two segments 12 bonded together by means of a layer 8. As illustrated in Figure 3, layer 8 comprises a cement layer 10 interposed between undercoat layers 9 in contact with the external side walls 7 of segments 12. Layers 9 and 10 are made from cements having different compositions.

Further, Applicants note that Merriman is directed towards construction materials. Thus, it does not belong to the technical field of the present invention (or Fujita), namely exhaust gas filtration structures for motor vehicles.

To avoid any issue in this regard, Applicants have modified claim 1 by deleting the wording "in particular for".

In addition, the materials of the elements building up the structure of Merriman are not at all the materials used in the present invention.

In particular, according to the present invention, the reinforcement means allows the thermal flux to propagate through the joint. Such a function is not disclosed by Merriman. In fact, Applicants submit that a glass fiber thread fabric cannot exhibit such a function.

Furthermore, the thermosetting adhesive used in Merriman is operable in the range of 100 to 250°F. This range is not compatible with a use in a particle filter subject to regeneration phase, where the temperature of the exhaust gases is usually around 900°F and reaches 1900°F during regeneration.

To emphasize this point, Applicants have added new claim 11, which is directed towards the materials of the filtration structure.

Finally, Merriman discloses how to fix a plate and a honeycomb core together. Moreover, the plate is fixed at the end of the channels of the honeycomb core 10, so that these channels are closed.

This structure teaches away from the claimed structure, as the structure disclosed in Merriman cannot be used as a filtering structure which requires channels open at one end. In addition, Merriman gives no incentives on a manner to fix together two honeycomb cores by there lateral surfaces.

In conclusion, Applicants submit that all these arguments converge to prove that combining the technical teachings of Fujita and Merriman is totally based on hindsight and disconnected from the reality experienced by the person skilled in the art.

Thus, Applicants submit that the present invention is not obvious over the Fujita and Merriman, and withdrawal of this rejection is respectfully requested.

Obviousness Rejection over Fujita in view of Merriman and further in view of Adiletta

On page 6 of the Office Action, in paragraph 16, claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. W003/048072 (translation provided by US 7,138,168) and US 2,952,579 as applied in claim 1 above and further in view of Adiletta US 5,228,891.

In response to this rejection, Applicants respectfully submit that Adiletta does not make up for the deficiencies of Fujita and Merriman as discussed above with respect to claim 1, so claims 2-6 are not obvious at least by virtue of their direct or indirect dependence on claim 1. Accordingly, withdrawal of this rejection is respectfully requested.

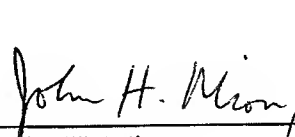

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

 
John H. Mion / Reg. No. 33,725
John H. Mion
Registration No. 18,879

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: July 31, 2009